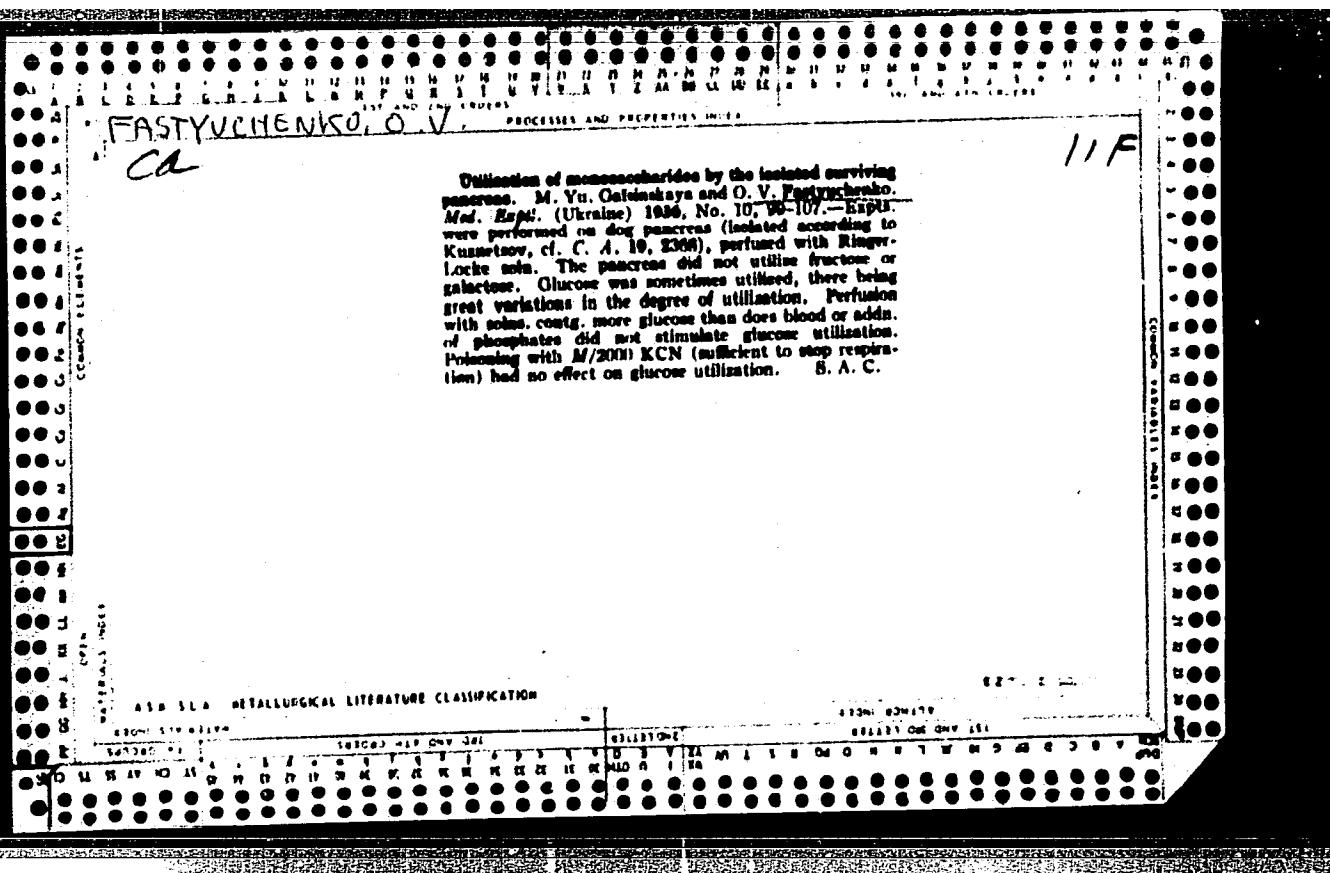


FASTYKOVSKAYA, Ye.D. (Rostov-na-Donu)

Diagnosis of cancer of the breast using the P<sup>32</sup> indicator.  
Med.rad. no.5:73-75 '62. (MIRA 15:8)  
(BREAST--CANCER) (PHOSPHORUS--ISOTOPES)

FASTYKOVSKIY, A., jurist; TIMOFEYEV, M., jurist

Our consultations. Sov. profsoiuzy 18 no.6:45-46 Mr '62,  
(MIRA 15:3)  
(Labor laws and legislation)



PASTYUCHENKO, O. V.

REACTANTS AND PRODUCTS INDEX

Glycogen content, reducing substances and intensity of glycogenolysis in different organs. O. V. Pastyuchenko. M. S. S. (Ukraine) 1939, No. 4, 32-7. Cf. C. A. 33, 173 (Smirnovich and Kuchnevaya modification of Pilziger's method) and reducing substances (Urbach's modification of Hagedorn-Jensen's method) were detd. in the tissues of the pancreas, thyroid, adrenal, kidney, spleen, salivary glands and lungs. True sugar (Raymond and Bianchi modification (cf. C. A. 23, 173) of Somogyi's method) was detd. in the pancreas. The marked decrease in the glycogen content of the isolated tissues (kept for 30 min - 2 hrs. at 38, 22 and 37°) was not accompanied by any significant increase in reducing substances. This is explained by lactic acid formation. True sugar in the pancreas amounts to 50-70% of the total reducing substances.  
S. A. Corson

11F

ASBULLA METALLURGICAL LITERATURE CLASSIFICATION

120MH 12100110	120MH 12100110	120MH 12100110	120MH 12100110
140380 4	183080 41P ONE USE	031133 ONE	031133 ONE USE

KFAST YUCHENKO, "O"

## PROCESSING AND PROPERTIES MODEL

ca

The influences of the stimulation of the vagus nerve and that of the administration of secretin on the carbohydrate metabolism of the pancreas. O. V. Fastyuchenko. *Mit. expd. (Ukraine)* 1940, No. 3, 81 ff.; *Chem. Zentr.* 1941, I, 533.—Raps. on dogs are reported. After operation under ether narcosis, the vagus nerve was stimulated with an induction current for 20 min. No distinct biochemical changes were observed. When secretin was simultaneously administered there was a distinct increase in the lactic acid in the tissues and in the blood flowing from the pancreas. The content in reducing substances was less but showed no relation to the amt. of lactic acid formed. No regularity in the changes in the glycogen content of the pancreatic tissue could be established.

11 F

**ASM-11A METALLURGICAL LITERATURE CLASSIFICATION**

卷之三

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5"

FASTYUCHENKO, O V

USSR/Human and Animal Physiology (Normal and Pathological)  
The Effect of Physical Factors. Ionizing Irradiation T

Abs Jour : Ref Zhur Biol., No 6, 1959, 27197

Author : Lemberg, A.A., Fastyuchenko, O.V.

Inst : -  
Title : On Some Changes of Metabolism in Experimental Animals in  
Irradiation of the Head with X-Rays.

Orig Pub : V sb.: Vopr. luchevoy terapii, Kiyev, Gosmedizdat USSR,  
1956, 202-207

Abstract : The heads of rabbits were irradiated with doses of 700 r  
and 500 r. After various time intervals, the animals  
were killed and the total amount of nucleic acids and,  
separately, RNA and DRNA in the brain was determined.  
In blood serum taken from the auricular vein before and  
after irradiation, the amount of ribonucleodépolimerase  
and desoxyribonucleinodépolimerase was determined. Even  
in irradiation with a dose of 700 r, the changes in the

Card 1/2

- 173 -

USSR/Human and Animal Physiology (Normal and Pathological)  
The Effect of Physical Factors. Ionizing Irradiation

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 27197

amount of RNA and DRNA in the brain did not exceed the  
limits of error. The activity of nucleodepolimerases  
in the blood decreased weakly 3-5 days after irradiation.  
-- B.K. Khuskivadze

Card 2/2

ARNAUTOV, A.K.; BURSHTEYN, Sh.A.; GENES, V.S.; KOGAN, I.K.; MAMATYUK, Ye.M.;  
LITVINENKO, A.S.; MOSKALENKO, I.P.; NIKOLAYEVA, M.G.; PISKAREVA, Ye.V.;  
POPOVA, L.Ya.; RUDNEV, L.I.; SIDYAKIN, V.V.; TKACH, V.K.;  
FASTYUCHENKO, O.V.; FISUN, A.N.; FRENKEL', L.A.; TSYBENKO, N.A.;  
SHRAMENKO, B.I.

Comparative study on the effect of X rays (197 kv) and braking radiation generated with linear accelerator (3 Mev) upon animals. Radio-biologija 2 no.2:211-215 '62.  
(MIR 15:4)

1. Khar'kovskiy institut meditsinskoy radiologii i Ukrainskoy fiziko-tehnicheskoy institut AN USSR, Khar'kov.  
(RADIATION--PHYSIOLOGICAL EFFECT)

L 17565-63 EWT(1)/EWT(m)/BDS/ES(j) AMD/AFETC/ASD AR/K

ACCESSION NR: AT3002360 S/2930/62/000/000/0028/0035 5/1

AUTHOR: Fastyuchenko, O. V. (Kharkov); Popova, L. Ya. (Kharkov); Nikolayeva, M. G. (Kharkov)

TITLE: Early changes in blood serum protein composition in acute radiation sickness 19

SOURCE: K voprosam ranney diagnostiki ostroy luchevoy bolezni; sbornik nauchnykh rabot. Kiev, Medgiz USSR, 1962, 29-35

TOPIC TAGS: blood serum, X-irradiation, general protein content, protein fraction, albumin, globulin subfraction

ABSTRACT: Lack of systematic observations on changes in blood serum total protein quantity and in protein fractions shortly after single total radiation exposure prompted this study. White rats were X-irradiated (RUM-3M unit, 28.5-32.0 r/min) in single doses ranging from 150 to 1200 r and tests were made 1, 24, 48, and 72 hrs after irradiation. Blood serum protein was determined by a micromethod and protein fractions were determined by electrophoresis on paper. In the first hour after irradiation for 150 to 1200 r the total protein content of the blood serum decreases. After 24, 48, and 72 hrs the total protein content in the blood serum grows proportionally to the Card 1/2

L-17565-63

ACCESSION NR: AT3002360

O

irradiation dose and time elapsed after exposure. Albumin content decreases and globulin content increases in all the serums shortly after exposure to X-irradiation regardless of dosage. Changes in the albumin-globulin coefficient value are similar to changes in albumin content under the same conditions. Increase in the globulin fraction is accompanied by increases in all its separate subfractions (alpha, beta, and gamma). The nature of the alpha-globulin changes coincides most of all with changes in the entire globulin fractions. Increase in globulins after irradiation can be considered as a natural protective reaction of the organism. Orig. art. has: 2 figures, 1 table.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 28May63

ENCL: 00

SUB CODE: AM

NO REF Sov: 008

OTHER: 006

Card 2/2

L 17562-63

ENT(1)/ENT(m)/BDS/ES(j). AMD/AFFTC/ASD AR/K

ACCESSION NR: AT3002363

8/2930/62/000/000/0054/0061

AUTHOR: Fastyuchenko, O. V. (Kharkov); Popova, L. Ya. (Kharkov);  
Nikolayeva, M. G. (Kharkov)

TITLE: Early changes in spleen and marrow nucleic acid contents in acute radiation sickness /9

SOURCE: K voprosam ranney diagnostiki ostroy luchevoy bolezni;  
sbornik nauchnykh rabot. Kiev, Medgiz USSR, 1962, 54-61TOPIC TAGS: acute radiation sickness, nucleic acid , spleen, marrow,  
DNA, RNA, X-irradiation

ABSTRACT: Spleen and marrow of white rats were X-irradiated (RUM-3 unit, 28.5-32.0 r/min) with single doses ranging from 150 to 1200 r and tests were made 1, 24, 48, and 72 hrs after exposure to determine nucleic acid changes. Nucleic acids were separated from the tissues by Schmidt's and Tangauzer's fractionation method. It was found that 1 to 72 hrs after irradiation the nucleic acids decrease in the spleen and marrow for all radiation doses. The sharpest decrease in nucleic acids in the spleen and marrow appears 24 hrs after irradiation with maximal RNA changes for 300, 450, and 1050 r and maximal DNA changes

Card 1/2

L 17562-63

ACCESSION NR: AT3002363

for 300, 450, 750, 1050, and 1200 r. 48 -72 hrs. after irradiation the sharpest decrease in RNA content is observed for 600 r and 750 r and the sharpest decrease in DNA content is observed for 600, 750, 1050, and 1200 r. With large doses of X-irradiation (900 and 1200 r) RNA content is restored to its normal level and in some cases exceeds it. The lack of correlation between radiation doses and the disturbances in the nucleic acids indicate that X-irradiation depending on dose affects different systems of the organism differently. Orig. art. has: 2 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 28May63

ENCL: 00

SUB CODE: AM

NO REF Sov: 012

OTHER: 007

Card 2/2

ARNAUTOV, A. K.; BURSHTEYN, S. A.; GENES, V. S.; DZHAFAROV, G. K.;  
KOGAN, I. A.; MAMOTYUK, Ye. M.; NIKOLAYEVA, M. G.; PISKAREVA,  
Ye. V.; POPOVA, L. Y.; TKACH, V. K.; FASTYUCHENKO, O. V.;  
FRENKEL', L. A.; TSYBENKO, P. A.

Characteristics of some early reactions of rats, irradiated  
with various doses, to burning by flame. Radiobiologija 2 no.3:  
406-413 '62. (MIRA 15:7)

1. Institut meditsinskoy radiologii, Khar'kov.

(X RAYS---PHYSIOLOGICAL EFFECT)  
(BURNS AND SCALDS)

Fasulati, K.K.

USSR/Special and General Zoology - Insects.

0-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69892

Author : Fasulati, K.K., Sikura, A.I.

Inst :

Title : The Ecological Survey of the Transkarpatian Orchard Pests

Orig Pub : Nauch. zap. Uzhgorodsk. un-ta, 1956, 16, 67-92

Abstract : The transcarpatian orchards are inhabited by the representatives of all orders of insects, but the beetles and scale insects are most wide-spread. The most dangerous pest is the Californian scale insect. The damage caused by it surpasses in number the new plantings in the area of infestation. The apple damage is up to 90 percent of its crop. The plum damage is up to 50 percent. Aphids, sawflies and moths are among the dangerous pests. The species and their noxiousness differ in various zones of transcarpatia which should be taken into consideration in the measures of prophylaxis. For example the

Card 1/2

- 47 -

USSR/General Biology. General Ecology

B

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57234

Author : Fasuleti K. K.

Inst : Uzhgorod University

Title : On the Investigation of the Biocenoses of the  
Polonins in Transcarpathia

Orig Pub : Nauchn. zap. Uzhgorodsk. un-ta, 1956, 16,  
109-118

Abstract : Observations were conducted in 1951 mainly in  
the Chernogory and Borzhavskiy Mountains of the  
Polonins. The ecological characteristics of the  
Polonins are given and their flora and fauna,  
and the distribution of insect life in particu-  
lar are described. The problems of the structure  
and formation of biocenoses in the Polonins a  
are discussed. The latter are regarded as inde-

Card1/2

46

FASULATIN, K. K.

14-57-6-12695

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,  
p 130 (USSR)

AUTHORS: Fasulatin, K. K., Derkach, A. D.

TITLE: Composition and Distribution of Coccinellinae in  
Trans-Carpathian Region (Nekotoryye dannyye o sostave  
i kharaktere raspredeleniya koktsinellid Zakarpat'ya)

PERIODICAL: Nauch. zap. Uzhgorodsk. un-ta, 1956, Vol 16, pp 147-166

ABSTRACT: The authors discuss Coccinellinae found in the  
trans-Carpathian Region (two species from the subgroup  
Subcoccinellinae and 61 species from the subgroup  
Coccinellinae). The article describes their distri-  
bution throughout the area, which is related to the  
distribution of fauna and flora upon which they feed.  
The authors distinguish the types which are peculiar to  
plains, deciduous and conifer forests, meadows, fields  
orchards, and gardens.

L. D.

Card 1/1

14-57-7-15086

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7,  
p 146 (USSR)

AUTHOR: Fasulati, K. K.

TITLE: Ten Years' (1945-1955) Study of the Invertebrates in  
Soviet Transcarpathia /Izuchenije bespozvonochnykh  
zhivotnykh Sovetskogo Zakarpat'ya za 10 let (1945-  
1955)/

PERIODICAL: Nauchn. zap. Uzhgorodsk. un-t, 1956, Vol 21, pp 41-56

ABSTRACT: Bibliographic entry  
Card 1/1

FASULATI, K. K.

USSR / General and Special Zoology. Insects

P

Abs Jour: Ref Zhur-Biol., No 1, 1958, 2188

Author : Fasulati K. K.

Inst :

Title : On the Spread of the Horvathia Hieroglyphica Muls.  
(Heteroptera, Miridae) in the Transcarpathian Dis-  
trict.

Orig Pub: Entomol. obozreniye, 1956, 35, No 1, 142-143

Abstract: Characteristically endemic to the Carpathian and the Pyrennes mountains, the monotypic species H. hieroglyphica, is spread in great numbers locally (through Borzhav poloniny [a Ukrainian Carpathian ridge]); it is adapted to the mat-grass (Nardus stricta) and its associate vegetation. Discovered within the boundaries of the USSR for the first time.

Card 1/1

Chair Biology (biopoznachnyki).  
13 Uzhgorodskij State Univ.

USSR / General and Specialized Zoology. Insects.  
Systematic and Faunistic.

P

Abs Jour : Ref Zhur - Biol., No 17, 1958, No 78150

Author : Fasulati, K. K.

Inst : Uzhgorod University

Title : On the composition, Character of Formation, and  
Distribution of Entomofauna of the Eastern Car-  
pathians.

Orig Pub : Dokl. i soobshch. Uzhgorods. un-ta, 1957, No 1,  
57-60.

Abstract : Peculiarities are given of the correlations of  
the separate faunistic elements among the col-  
eoptera and, partially, the hemiptera. Peculi-  
arities are given of the distribution of the  
northern, southern and forest species of coleop-  
tera, penetrating into the Eastern Carpathians.

Card 1/2

Country : USSR  
CATEGORY :

P-5

ABSTRACT JOUR. : RZBiol., No. 19, 1958, No. 87703

AUTHOR : Fasulati, K. K.  
INST. : Uzhgorod University  
TITLE : The Nature of Distribution of the American  
white Moth (*Hyphantria cunea* Drury) in the  
Zakarpatskaya Oblast'.  
ORIG. PUB. : Dokl. i soobshch. Uzhgorodsk. un-ta, 1957,  
No 1, 72-74

ABSTRACT : *H. cunea* which appeared in Europe in 1940,  
was discovered in 1952 in the Zakarpatskaya Oblast'.  
During the next 5 years it was encountered within the  
limits of inhabited localities. In the plain, small, well  
lit, groves of trees near homesteads, in gardens and parks,  
are the main sites of occurrence of *H. cunea*, while large  
stands of tall timber, regardless of their species, and  
the mountain districts are less favorable to development  
of the pest. Carpathian Mountains are a natural barrier  
to the spreading of the moth. The species is a menace to  
only those areas of the USSR where temperature and moisture  
conditions similar to those of North America are found in  
conjunction with suitable ecological and terrain environment.

CARD: 1/2

FASULATI, K.K.

Terrestrial invertebrate fauna of the Eastern Carpathians. Nauk.  
zap. UzhGU 40:121-140 '59. (MIRA 14:4)

1. Uzhgorodskiy gosudarstvennyy universitet.  
(Carpathian Mountains—Invertebrates)

FASULATI, Kirill Ksenofontovich; TVERITINA, T.A., red.

[Ecology and economic importance of insects; a cycle of lectures on the course "Entomology"] Ekologiia i khoziaistvennoe znachenie nasekomykh; tsikl lektsii po kursu "Entomologija." Uzhgorod, Uzhgorodskii gos. univ., 1961.  
61 p. (MIRA 17:10)

FASULATI, Kirill Ksenofontovich; RAZVYAZKINA, G.M., red.; KAPYSHEVA, V.S.,  
red. izd-va; STOLYAROVA, M.T., tekhn. red.

[Field study of terrestrial invertebrates] Polevoe issuchenie na-  
zemnykh bezpozvonochnykh. Moskva, Gos. izd-vo "Vysshiaia shkola,"  
1961. 303 p.  
(Invertebrates) (Zoology—Field work)

FASULATI, K.K.; SMETNIK, A.I.

Ecologic characteristics of dendrophilous plant lice (Aphidodea)  
of Transcarpathia. Nauch. dokl. vys. shkoly; biol. nauki no.1:  
21-23 '64. (MIRA 17:4)

1. Rekomendovana kafedroy zoologii Uzhgorodskogo gosudarstvennogo  
universiteta.

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5

FASULATI, R.K., inzh.

Manufacture of welded blades for a large hydraulic turbine.  
[Trudy] LMZ no.10:376-387 '64. (MIRA 18:12)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5"

FASYKHANOV, S.I.

Chemical composition of the meat and the physicochemical  
properties of the fat of Gissar sheep. Izv.Otd.est. nauk AN  
Tadzh.SSR no.12:149-158 '55. (MLRA 9:10)

1. Institut zhivotnovodstva Akademii nauk Tadzhikskoy SSR.  
(Mutton)

FASZEKASNE VARADY, Zsuzsa

New books in the Library of the Geographical Research Group,  
Hungarian Academy of Sciences. Foldrajzi ért 11 no.4:486,509-512  
'62.

FASZFALOW, J.

"Selecting a method of repairing defective gray-iron castings," Przeglad  
Odlewnictwa, Krakow, Vol 4, No 7/8, July/Aug. 1954, p. 228.

SO: Eastern European Accessions List, Vol 3, No 11, Nov 1954, L.C.

FASZFALOW, J.

Poland

Improving the appearance of untreated surfaces of defective iron castings.

SO: Foundry Journal, Poland, #1, Jan 1955, Unclassified.

FASZOLJA K.N.

FASZOLJAK, N.

"Planning Supply of Materials for Industrial Enterprises. Tr. from  
the Russian", P. 28. (TOPBTERMÉLES, Vol. 8, No. 2, Feb. 1954, Budapest,  
Hungary)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4,  
No. 1, Jan. 1955, Uncl.

RUMANIA/Pharmacology - Toxicology - Tranquilizers.

V

Abs Jour : Ref Zhur Biol., No 4, 1959, 18556

Author : Faszt, Gh.

Inst : -

Title : Pharmacology and Therapeutic Application of New  
Phenotiazine Derivatives

Orig Pub : Farmacia (Romin.), 1958, 6, No 3, 203-208

Abstract : No abstract.

Card 1/1

FARSYKHNOM, S. I.

"Growth Changes in the Meat and Tallow Productivity of Gissar Sheep." Cand Agr Sci, Alma-Ata Zooveterinary Inst, Min Higher Education USSR, Alma-ATA, 1954. (KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55, Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

WILLIAM CHAPMAN, S. I.

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5"

FAROVYANTS, A. G., SIMONOVICH, G. D., USHURTSEVA, O. T., KHRAYEV, L. B.,  
LYUBETSKIY, KH. Z.

"On the toxicological evaluation of certain chemically harmful  
substances which act in small concentrations."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists  
and Infectionists, 1959.

FARTAK, J.

Cooperation with the Solo National Enterprise at Susice. p. 255.  
ZELEZNICE, Prague, Vol. 4, no. 10, Oct. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,  
June 1956, Unclassified.

MARINESKU, V. [Marinescu, F.], prof. (Rumynskaya Narodnaya Respublika);  
FERTETSESku, G. [Fartatescu, G.] (Rumynskaya Narodnaya Respublika);  
KRISTYA, I. (Rumynskaya Narodnaya Respublika); LITARCHEK, G.  
(Rumynskaya Narodnaya Respublika)

Syndrome of acute fibrinolysis in surgery. Khirurgiia 38  
no.12:72-77 D '62. (MIRA 17:6)

PARTUKOV, M.M.; LEVSHIN, B.A.

Turonian of the Krasnovodsk Peninsula and the central Kara Kum.  
Izv.AN Turk.SSR.Ser.fiz.-tekhn., khim.i geol.nauk no.2:125-126  
'62. (MIRA 15:4)

1. Upravleniye geologii i okhrany nedr pri Sovete Ministrov  
Turkmenskoy SSR.  
(Krasnovodsk region—Geology, Stratigraphic)  
(Kara Kum—Geology, Stratigraphic)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5

LEVSHIN, B.A.; FARTUKOV, M.M.

Upper Cretaceous sediments in the Kizyl-Arvat structural  
nose. Neftegaz. geol. i geofiz. no.3:27-30 '63.  
(MIRA 16:8)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5"

DIKENSSTEYN, G.Kh.; KUTUZOVA, V.V.; MASHRYKOV, K.K.; BABAYEV, A.G.;  
POL'STER, L.A.; YUFEREV, R.F.; SHISHOVA, A.I.; BAREYEV,  
R.A.; MAKAROVA, L.N.; MURADOV, K.; PYANOVSKAYA, I.A.;  
SEMENOV, V.N.; SIROTINA, Ye.A.; TURKINA, I.S.; FEL'DMAN,  
S.L.; KHON, A.V.; KUNITSKAYA, T.N.; GOLENKOVA, N.P.;  
ROSHINA, V.M.; FARTUKOV, M.M.; SHCHUTSKAYA, Ye.K.;  
ALTAYEVA, N.V.; BYKADOROV, V.A.; KOTOVA, M.S.; SMIRNOV,  
L.M.; IBRAGIMOV, M.S.; KRAVCHENKO, M.F.; MARKOVA, L.P.;  
ROZYYEVA, T.R.; UZAKOV, O.; SLAVIN, P.S.; NIKITINA, Ye.A.;  
MILOGRADOOVA, M.V.; BARTASHEVICH, O.V.; STAROBINETS, I.S.;  
KARIMOV, A.K.

[Splicing of the wires of overhead power transmission lines]  
Soedinenie provodov vozduzhnykh linii elektroperedachi. Mo-  
skva, Energiia, 1964. 69 p. (Biblioteka elektromontera,  
no.132) (MIRA 17:9)

FARTUNIN, I.

Tasks of municipal-service trade-union organizations according to  
the seven-year plan. Zhil.-kom.khоз. 9 no.6:1-3 '59.  
(MIRA 12:10)

1. Predsedatel' TSentral'nogo komiteta profsoyuza rabochikh mestnoy  
promyshlennosti i komunal'nogo khozyaystva.  
(Municipal services)

IVANOV, Ye.B.; PETRENKO, D.S.; YARTUSHNAYA, R.M.

Change of the flow system for processing flushing liquors.  
Koks i khim. no.5:41-43 '60. (MIRA 13:7)

1. Krivoroshskiy metallurgicheskiy zavod.  
(Krivoy Rog--Coke industry--By-products)

IVANOV, Ye.B.; PETRENKO, D.S.; FARTUSHNAYA, R.M.

Introduction of a new flow chart into the practice of the ammonia-pyridine division. Koks i khim. no. 5:37-38 '61. (MIRA 14:4)

1. Krivorozhskiy metallurgicheskiy zavod.  
(Krivoy rog—Coke industry—By-products) (Ammonia)  
(Pyridine)

IVANOV, Ye.B.; FARTUSHNAYA, R.M.

Effect of the coking time on the mechanical properties of coke.  
Koks i khim. no.11:28-29 '62. (MIRA 15:12)

1. Krivorozhskiy metallurgicheskiy zavod.  
(Coke—Testing)

BRUK, A.S.; LEYBOVICH, R.Ye.; IVANOV, Ye.B.; SMUL'SON, A.S.; BELUKHA,  
A.A.; MUCHNIK, D.A.; FARTUSHNAYA, R.M.; Prinimali uchastiye:  
KUTEVOY, P.M.; GOL'DBERG, P.Ya.; NECHAYEVA, A.P.; KUBYSHKINA,  
L.I.; SHEYKHET, A.M.; VASIL'CHENKO, S.I.; BARASH, D.A.;  
KARPOVA, K.K.; KHODANKOV, A.T.

Effect of temperature changes in the control heating flues on  
the quality of the metallurgical coke. Koks i khim. no.7:26-27  
'63. (MIRA 16:8)

1. Dnepropetrovskiy metallurgicheskiy institut (for Bruk,  
Leybovich, Kutevoy, Gol'dberg, Nechayeva, Kubyshkina, Sheykhet).
2. Krivorozhskiy metallurgicheskiy zavod (for Ivanov, Smul'son,  
Belukha, Muchnik, Fartushnaya, Vasil'chenko, Barash, Karpova,  
Khodankov).  
(Coke ovens)    (Coke--Testing)

CHERTOK, V.T.; LEYBOVICH, R.Ye.; IVANOV, Ye.B.; SHCHEGOLEV, S.V.;  
FARTUSHNAYA, R.M.; MUCHNIK, D.A.; TSYPIN, A.Z.

Effect of coking time on the quality of coke. Koks i khim.  
no.1:23-25 '64. (MIRA 17:2)

1. Pridneprovskiy sovet narodnogo khozyaystva (for Chertok).
2. Dnepropetrovskiy metallurgicheskiy institut (for Levbovich).
3. Krivorozhskiy metallurgicheskiy zavod (for Ivanov,  
Shchegolev, Fartushnaya, Muchnik). 4. Koksokhimstantsiya  
(for TSypin).

PARTUSANY, A.W.

Reactions of the manifestation of chlorophos; report No.1.  
Sud.-med. eksper. '7 no.1:34-36 Ja-Mr'64 (MIRA 17:4)

1. Donetskoye oblastnoye byuro sudebnomeditsinskoy ekspertizy  
(nachal'nik - dotsent B.N.Zorin).

S/125/b2/000/002/007/010  
D040/C113

AUTHORS: Kakhovskiy, N.I.; Yushchenko, K.A.; Fartushnyy, V.G.

TITLE: Welding materials for new stainless and acidproof steels with low nickel content

PERIODICAL: Avtomaticheskaya svarka, no. 2, 1962, 89-90

TEXT: Welding wire and electrode and flux grades to be used for new Soviet steels developed as substitutes for steels with 9-12% Ni are recommended. According to TsNIIChM data, the applications of the new steels are as follows:

Substitutes	Replaced steel	Approximate applications of the substitutes
X14Г14Н (Kh14G14N), X14Г14Н3Т (Kh14G14N3T),	ОХ 18Н9 (OKh18N9), 1Х18Н9 (1Kh18N9),	For service under atmospheric conditions and in weakly corrosive media (food industry, etc, oxygen machinery) at up to -196°C.
Card 1/3		✓

5/125/02/000/002/007/010  
0040/0113

Welding materials for .....

Table continued

<b>X26 AH (Kh18Ni), OX21M5T (OKh21N5T), 1X21M5T (1Kh21N5T), OX21M5T (OKh21N5T), X18M2A15 (Kh18N2AG5),</b>	<b>OX16M9 (OKh18N9), 1X16M9T (1Kh18N9T),</b>	In various branches of chemical, food, and coke-gas industries.
<b>X17H4A7 (Kh17N4AG7), X17H5ГyA5 (Kh1 N5G9AB) and allied grades</b>	<b>1X16M9T (1Kh18N9T), 1X16M9 (1Kh18N9), 2X18M9 (2Kh18N9),</b>	In chemical, petroleum, food, electrical and other industries. Recommended also as nonmagnetic steel. ✓
<b>OX21M6M2T (OKh21N6M2T), X17H6M2T (Kh17N6M2T) and allied grades</b>	<b>1X18H12M2T (1Kh18N12M2T), 1X18H12M3T (1Kh18N12M3T)</b>	For service in corrosive media (acetic, lactic, formic and oxalic acids); not recommended for service in nitric acid.

Card 2/3

S/125/62/000/00-/007/010  
D040/D113

Welding materials for .....

The substitutes have been developed by research institutes and in industry. The institut elektrosvariki im. Ye.O. Patona (Electric Welding Institute im. Ye. O. Paton) is working on the welding technology for them. Some properties of the substitutes are mentioned: Kh14Cr4N3T is weldable by any welding method without subsequent heat treatment; Kh28AN is weldable but tends to intercrystalline corrosion in heat-affected metal at welds, which is eliminated by tempering at 800-850°C; 1Kh16N2.4G5 can develop intercrystalline corrosion after heating to 500-800°C, but welds produced with milder process are not prone to it; OKh21N5T and OKh21K6M2T is not prone to intercrystalline corrosion in any state - before welding, after heating to 500-800°C or after welding. Wires, electrodes and fluxes recommended for different substitute steels in different welding methods are named by their trade names without indication of the chemical compositions. The recommendations include one proposed by NIIkhimash concerning electrodes for manual welding of Kh28AN steel. The Electric Welding Institute is developing electrode wires with lowered nickel content.

Card 1/5

34458  
S/125/62/000/003/003/006  
D040/D113

10/11/30

AUTHORS: Kakhovskiy, N.I., Fartushnyy, V.G., and Yushkevich, Z.V.

TITLE: Welding Kh18N2AG5 thin sheet steel

PERIODICAL: Avtomaticheskaya svarka, no. 3, 1962, 27-31

TEXT: The techniques and results are given of welding experiments with a new austenite-ferritic steel, X18H2AG5 or 3Н-26 (Kh18N2AG5, or EP-26), developed by the Moskovskiy aviatsionnyy tekhnologicheskiy institut (Moscow Aviation Technological Institute) and suggested for use in the manufacture of chemical, textile and food-processing equipment. The composition of Kh18N2AG5 per 4МТУ 57-58 (ChMTU 57-58) is: < 0.1% C, < 0.8% Si, < 0.030% S, < 0.035% P, 4-6% Mn, 17-20% Cr, 1.5-2.5% Ni, and 0.15-0.25% N. Steel used in experiments was 3 mm thick. About 40%  $\alpha$  phase was revealed in it by X-ray structural analysis. Automatic subarc and gas-shielded arc welding was tried and an AH-26 (AN-26) welding flux and two standard electrode wire grades were used. Welds were tested for mechanical properties and corrosion. ✓

Card 1/3

S/125/62/000/003/003/008  
D040/D113

Welding Kh18N2AG5 ...

The test results show that embrittlement occurs at 475°C, there is no tendency to intercrystalline corrosion before heat treatment, and a very high tendency to it after 2.5 hrs heating at 650°C with subsequent air cooling. Subsequent heating for 2.5 hrs at 850°C eliminated the tendency to intercrystalline corrosion but did not completely restore the general corrosion resistance in boiling 56% nitric acid. The following conclusions were drawn: (1) The Kh18N2AG5 (EP-26) steel can be used as a substitute for 18-8 type steels in the fabrication of welded equipment for chemical and food-processing machinery; (2) any arc welding process can be used for welding this steel; (3) welds produced under normal conditions (with moderate power per unit length) need no subsequent heat treatment. However, a tendency to intercrystalline corrosion develops after long-term holding within the critical temperature range (500-800°C). Minimum possible current at maximum speed must be used; (4) the OKh18N9F2C (EI-606) [OKh18N9F2S (EI-606)] and Cg-10X20H15 (Sv-10Kh20N15) wire grades can be used for subarc process and for CO<sub>2</sub> welding; (5) further investigations are necessary for welding Kh18N2AG5 steel of more than 3 mm thickness. There ✓

Card 2/3

Welding Kh18N2AG5 ...

S/125/62/000/003/003/008  
D040/D113

are 4 figures and 2 tables.

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.  
Ye.O.Patona AN USSR (Electric Welding Institute "Order of the  
Red Banner of Labor" im. Ye.O.Paton, AS UkrSSR)

SUBMITTED: July 18, 1961

Card 3/3

S/125/62/000/007/007/012  
D040/D113

AUTHORS: Kakhovskiy, N.I., and Fartushnyy, V.G.

TITLE: Welding technology for stainless Kh14G14N3T (EI711) steel

PERIODICAL: Avtomaticheskaya svarka, no. 7, 1962, 71-80

TEXT: X14Г14Н3Т (Kh14G14N3T) or 3И711 (EI711) is a low-temperature steel developed by the TsNIIchermet and recommended for the oxygen industry as a substitute for "18-8" steel. Experiments are described in which the proper technology has been found for manual, automatic submerged-arc, and CO<sub>2</sub>-shielded welding of this steel. The composition of Kh14G14N3T per ГОСТ 5632-61 (GOST 5632-61) is as follows: < 0.1% C, 13-15% Mn, < 0.8% Si, 13-15% Cr, 2.5-3.5% Ni; (C-0.02) x 5 ÷ 0.6% Ti, < 0.02% S, < 0.035% P. Steel supplied for experiments from the "Elektrostal'" Plant contained 0.09% C, 13.67% Mn, 0.33% Si, 14.40% Cr, 3.11% Ni, and 0.50% Ti. The results of experiments are shown in tables and photomicrographs. Conclusions: This steel can be used as a substitute for "18-8" in welded equipment destined for service under pressure at temperatures down to -196°C, is weldable by any arc welding process and requires no heat treatment after welding. ✓

Card 1/3

S/125/62/000/007/007/012  
D040/D113

Welding technology for .....

Kh14Cr14N3T electrode wire is recommended for all welding processes. In manual welding, it must be used with a basic coating of, for example, 3HTy-3 (ENTU-3); in this way, an impact resistance not lower than 3 Kg/cm<sup>2</sup> at -196°C, and equal mechanical strength of the base metal and welds is ensured; 3A1 (EAl) electrodes may be used if the mechanical strength of the welds has to be lower. Submerged-arc welding must be conducted with an AH-26 (AN-26) flux; if С8-04X19Н9 (Sv-04Kh19N9) wire is used instead of Kh14Cr14N3T, welds whose strength is equal to the base metal are obtained when the fusion is deep and the joints are welded without bevelling the edges. When an AHС-6 (ANF-6) flux is used, the ultimate strength of the weld metal is 3-3.5 Kg/mm<sup>2</sup> lower and the impact resistance at -196°C, 3.5-7.5 kg-m/cm<sup>2</sup> higher than in welds produced with an AN-26 flux; this seems to be due to the lower content of silicate inclusions in welds welded with an ANF-6 flux. CO<sub>2</sub>-shielded welding may be conducted with the same wires as used in submerged-arc welding; the impact resistance at -196°C in weld metal produced with Kh14Cr14N3T wire in CO<sub>2</sub>-shielded welding is 7.9 kg-m/cm<sup>2</sup>, and in weld metal from Sv-04Kh19N9 wire only 3.5 kg-m/cm<sup>2</sup>. The preparation of edges and the required welding process parameters are the same as for welding "18-8" steel. There are 8 tables and 5 figures.

Card 2/3

S/125/62/000/007/007/012  
D040/D113

Welding technology for .....

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.  
Ye.O. Patona AN USSR (Electric Welding Institute "Order of the Red  
Banner of Labor" im. Ye.O. Paton, AS UkrSSR)

SUBMITTED: July 13, 1961

Card 3/3

43199

S/125/62/000/012/001/004  
A006/A101

1.2390

AUTHORS: Kakhovskiy, N. I., Fartushnyy, V. G., Yushchenko, K. A., Didebulidze,  
D. V.

TITLE: Investigating intercrystalline corrosion of the weld-adjacent zone  
metal in X 28 AH (Kh28AN) steel welded structures

PERIODICAL: Avtomaticheskaya svarka, no. 12, 1962, 1 - 8

TEXT: The investigation was made with 2 mm thick steel, containing (in %):  
C 0.14, Mn 0.61, Si 0.42, Cr 25.7, Ni 1.64, N 0.142. This steel is not prone to  
intercrystalline corrosion in delivery state. However, after heating during the  
welding process (high-temperature heating and rapid cooling) sensitivity to  
intercrystalline corrosion appears in the weld-adjacent zone of this steel. The  
authors assume that this phenomenon may be caused a) by the impoverishment in  
chromium of the austenite phase contacting the ferrite (during heating over  
950°C) and b) by the formation of thin non-stable austenite interlayers along the  
ferrite grain boundaries, which are poor in Cr and are rapidly decomposed accord-  
ing to kinetics of martensite transformation. As a result, the resistance of the

Card 1/2

Investigating intercrystalline corrosion of...

S/125/62/000/012/001/004  
A006/A101

steel to intercrystalline corrosion is reduced. This defect can be eliminated by subsequent tempering. The excess carbon is singled out of the martensite layers, forming complex carbides along the grain boundaries with prevailing Cr content. The boundary layers are softened. Simultaneously with carbide separation, the chromium is diffused from the central zones of ferrite grains to the impoverishing boundary zones, and also from the ferrite into the austenite phase (at sufficiently high tempering temperatures). As a result, the Cr content in the grains of both phases is equalized and the steel acquires its initial corrosion resistance. Full stabilization is achieved by tempering at 800 - 850°C during 1.5 - 2.5 hours. There are 6 figures and 1 table.

ASSOCIATION: Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im. Ye. O. Patona AN USSR (Order of the Red Banner of Labor Institute of Electric Welding imeni Ye. O. Paton, AS UkrSSR)

SUBMITTED: June 11, 1962

Card 2/2

KAKHOVSKIY, N.I.; FARTUSHNYY, V.G.

Technology of welding Kh14G14M3T (El711) stainless steel. Avtom.  
svar. 15 no.7:71-80 Jl '62. (MIRA 15:7)

1. Ordona Trudovogo Krasnogo Znameni institut elektrosvarki imeni  
Ye.O. Patona AN USSR.  
(Steel, Stainless-Welding)

S/125/63/000/003/006/012  
A006/A101

AUTHORS: Kakhovskiy, N. I., Fartushnyy, V. G.

TITLE: Welding thin-sheet X28 AH (Kh28AN) steel with a submerged arc and in CO<sub>2</sub>

PERIODICAL: Avtomaticheskaya svarka, no. 3, 1963, 53 - 55

TEXT: The investigation was made with sheet steel  $\delta = 2$  mm containing in per cent: C 0.14; Mn 0.61; Si 0.42; Cr 25.7; Ni 1.64; N 0.142. The mechanical properties of the steel in finished state are:  $\sigma_t = 48.5 \text{ kg/mm}^2$ ;  $\sigma_v = 6.21 \text{ kg/mm}^2$ ;  $\delta_5 = 20.8\%$ ;  $\psi = 66.6\%$ ;  $a_n = 6.6 \text{ kgm/cm}^2$ ;  $\alpha = 180^\circ$ . In welding with a closed arc welding wire CB-08X19H9Φ2C 2 (Sv-08Kh19N9F2S2) and CB-08X20H9Γ7T (Sv-08Kh20N9G7T), 2 mm in diameter, were used in combination with flux AH-26 (AN-26); for welding in CO<sub>2</sub> (140 - 150 amps current; 22 - 23 v arc voltage, 30 m/hour welding speed) wire O3X20H9C2BTIO (08Kh20N9S2HTYu) was employed. The butts were welded on a copper backing plate. The following results are obtained. Steel Kh28AN can be partially used to replace 18-8 type steels in manufacturing welded equipment for chemical, food, and other industries.

Card 1/2

8/125/63/000/003/006/012

A006/A101

Welding thin sheet X 28 AH (Kh28AN) steel with...

Steel Kh28AN can be welded by any type of the arc process. As was shown in a previous investigation, proneness to intercrystalline corrosion, determined by the standard AM method, is shown under the effect of the heat cycle in the weld-adjacent zone of Kh28AN steel joints. However, in a number of media of moderate aggressiveness, (including boiling nitric acid of up to 50% concentration) weld joints of this steel are resistant to intercrystalline corrosion without heat treatment. For automatic welding with a submerged arc, welding wires Sv-08Kh19N9F2S2, and Sv-08Kh20N9G7T can be used in combination with AN-26 flux. For welding in CO<sub>2</sub> wire OKh20N9S2BTYu can be used. It is necessary to conduct further investigations of the weldability of Kh28AN steel, δ > 3 mm, and to make more precise the welding techniques by taking into account the operational conditions of equipment manufactured of this steel grade. There are 2 tables and 1 figure.

ASSOCIATION: Institut elektrosvarki imeni Ye. O. Patona, AN USSR (Institute of Electric Welding imeni Ye. O. Paton, AS UkrSSR)

SUBMITTED: June 11, 1962

Card 2/2

KAKHOVSKIY, N.I.; FARTUSHNYY, V.G.; YUSHCHENKO, K.A.; DIDEBULIDZE, D.V.

Investigating intercrystalline corrosion in the weld metal  
zone in welded Kh28AN steel. Avtom. svar. 15 no.12:1-8  
D '62. (MIRA 16:2)

1. Ordona Trudovogo Krasnogo Znameni institut elektrosvarki  
imeni Ye.O. Patona AN UkrSSR.  
(Chromium steel—Welding)  
(Metals, Effect of temperature on)

L 10302-63

EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD/HM/JT

ACCESSION NR: AP3001116

S/C125/63/000/007/0021/0028

AUTHOR: Kakhovskiy, N. I.; Yushchenko, K. A.; Fartushny\*y, V. G.; Yushkevich, Z. V.TITLE: Welding of corrosion-resistant austenitic OKh17N5G9AB (EP55) chromium-nickel-manganese-nitrogen steel

SOURCE: Avtomaticheskaya svarka, no. 7, 1963, 21-28

TOPIC TAGS: OKh17N5G9AB steel, nitric-acid-resistant steel; welding of OKh17N5G9AB steel, Ch18NiOT steel

ABSTRACT: Effects of short-time welding heating and provoking heating at 650°C on the corrosion resistance of the above steel and its welded joints were investigated. The steel has been used in the nitric-acid production equipment. The carbon-dioxide-blanketed submerged-arc automatic welding was specifically studied; the best welding conditions and welding wire were found. Mechanical and corrosion characteristics of welds were determined and compared with those of Ch18NiOT steel. The following conclusions are offered: (1) any type of arc welding is applicable without subsequent heat treatment; (2) welding wire of the same steel with TiL11 coating can be used for manual welding; (3) V and Si, over 1 per cent of each, are

Card 1/2

L 10302-63

ACCESSION NR: AP3001116

3

detrimental to the corrosion resistance of welds in nitric acid. The OKh17N5G9AB steel was developed at the TsNIIchermet Institute by A. A. Babakov and his aides. Orig. art. has: 5 figures and 4 tables.

ASSOCIATION: Institut elekrosvarki im Ye. O. Patona AN UKrSSR (Institute of Electric Welding, AN UKsSSR)

SUBMITTED: 27Sept62

DATE ACQD: 02Aug63

ENCL: 00

SUB CODE: 00

NO REF Sov: 002

OTHER: 000

RK/PY  
Card 272

KAKHOVSKIY, N. I.; FARTUSHNYY, V. G.

Welding thin-sheet Kh26M steel under flux and in carbon  
dioxide. Avtom. svar. 16 no.3:53-55 Mr '63.  
(MIRA 16:4)

1. Institut elektrosvarki imeni Ye. O. Patona AM UkrSSR.

(Sheet steel—Welding)

KAKHOVSKIY, N.I.; YUSHCHENKO, K.A.; FARTUSHNYY, V.G.; YUSHKEVICH, Z.V.

Welding of corrosion-resistant chromium-nickel-manganese,  
Okh17N5G9AB (EP55) steel. Avtom. avar. 16 no.7:21-28 J1  
'63. (MIRA 16:8)

1. Institut elektrosvarki im. Ye.O.Patona AN UkrSSR.  
(Chromium-nickel steel--Welding)

ACCESSION NR: AP4039764

S/0125/64/000/006/0014/0018

AUTHOR: Kakhovskiy, N. I.; Fartushnyy, V. G.

TITLE: Effect of manganese on the structure and properties of high-chromium welds

SOURCE: Avtomaticheskaya svarka, no. 6, 1964, 14-18

TOPIC TAGS: stainless steel, chromium stainless steel, steel weld, manganese alloy weld, weld corrosion resistance, weld intergranular corrosion

ABSTRACT: The effect of manganese on properties of the metal of submerged arc welds in Kh17T chromium steel made with Sv-06X19H9T electrode wire has been investigated. Manganese was put into weld grooves. As the manganese content increased to 12—13%, the austenite content of the weld metal increased to 90—95%. A further increase of Mn content somewhat decreased the content of austenite. Elongation, reduction of area, and notch toughness increased continuously as the manganese content increased to 10—12%. However, both hardness and yield strength dropped with the increase of manganese content to 9—10%. The optimal

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ACCESSION NR: AP4039764

combination of mechanical properties of weld metal containing 17.0—18.6% Cr and 4.05—5.2% Ni was attained at a manganese content of 7—10%. Weld metal with manganese content of 13—14% has a satisfactory corrosion resistance in nitric acid at concentrations up to 56% and temperatures up to 70C. No signs of intergranular corrosion were observed. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Institut elektrosvarki im. Ye. O. Patona AN UkrSSR  
(Electrowelding Institute, AN UkrSSR)

SUBMITTED: 06May63 DATE ACQ: 24Jun64 ENCL: 00

SUB CODE: MM NO REF Sov: 007 OTHER: 006

Card 2 / 2

S/057/62/032/008/014/015  
B104/B102

AUTHORS: Yendzheyets, G.; Molchanov, V. A., Tel'kovskiy, V. G., and Faruk, M. A.

TITLE: Angular distribution of evaporated particles in the irradiation of single crystals with an ion beam

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 8, 1962, 1032 - 1033

TEXT: The angular distribution of the particles produced when the (100) faces of copper and nickel single crystals were irradiated with argon and neon ions was measured. The diameter of the single crystal surface irradiated was smaller than 8 mm, the distance between target and collector 95 mm. The target temperature was lower than 100°C, the angle of incidence of the ions 20°. After irradiation five Wehner spots became visible on the collector: four at the corners corresponding to the (110) axis, and one in the center which corresponded to the (100) axis. The density of the spots was determined photometrically. (Fig. 1). The angular distribution of particles and that of the sputtering coefficient do not depend on mass and energy of the ions. There are 3 figures.

Card 1/2

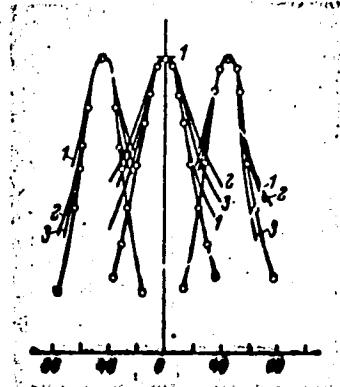
S/057/62/032/008/014/015  
B104/B102

Angular distribution of...

ASSOCIATION: MGU

SUBMITTED: October 24, 1961

Fig. 1



Card 2/2

ACCESSION NR: AP4005398

S/0188/63/000/006/0013/0017

AUTHOR: Mashkova, Ye. S.; Molchanov, V.A.; Faruk, M.A.

TITLE: Angular relationships in small-angle scattering of inert gas ions

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, No. 6,  
1963, 13-17

TOPIC TAGS: ion scattering, inert gas ion, fast ion, ion bombardment, surface  
bombardment, metal target, small angle scattering

ABSTRACT: Data in the literature indicate that by changing the angle of  
incidence of ions on a target and the velocity of the incident particles it  
is possible, within certain limits, to change the ratio of the number of par-  
ticles experiencing single and multiple collision. However, the results of  
certain studies of the angular distribution of reflected particles do not  
agree with the results of investigation of the spectra of reflected ions and  
do not agree with current concepts on the mechanism of the interaction of ions  
with a solid body. A study, therefore, was made of the angular relationships  
of reflection of ion beams on metal surfaces. A beam of monoenergetic, singly-  
charged ions of inert gases (argon and helium) with energies of 30 kev was pro-

Card: 1/3

ACCESSION NR: AP4005398

duced in a mass-monochromator. Angular convergence of the beam was plus or minus 1 degree and current density near the focus, where the target was situated, was about 1 ma/centimeter square. Grazing angles ranged from 4 to 26 degrees. Targets were semicrystalline metal specimens (W, Cu, Ti, Ni, Mo, Be) and graphite. Upon reflection from the target a large part of the ions were neutralized. Since the angles of scattering at which the measurements were made were small, the secondary electron emission current was proportional to the number of reflected particles incident on the collector, and the curves of the dependence of the secondary electron emission current on the scattering angle, in the case of a constant grazing angle, described the angular distribution of the reflected particles. Series of curves are given for the dependence of the secondary electron emission currents on the scattering angle for different grazing angles. All have a similar shape, regardless of the ratio of the masses of the incident particles and the atoms of the targets. In the case of small grazing angles the curves have a clearly expressed maximum, after which there is a monotonic drop-off. Increase of the curve to a maximum apparently is related to the microrelief of the specimen. The shape of the curves changes with an increase of the grazing angle: the slope becomes flatter.

Card 2/3

ACCESSION NR: AP4005398

When the targets are bombarded with helium' ions, the drop-off occurs more slowly with an increase of the grazing angle than with bombardment with argon ions. The experimental data qualitatively confirm the applicability of a "gas model" of a solid body. Quantitatively, it is difficult to theoretically take into account the relative role of processes of multiple scattering. Experimental methods must be improved. Orig. art. has 6 figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki (Scientific Research Institute of Nuclear Physics)

SUBMITTED: 15Nov62

DATE ACQ: 20Jan64

ENCL: 00

SUB CODE: PH

NO REF SOV: 006

OTHER: 006

Card 3/3

L 13039-63 EWT(1)/EWG(k)/EWP(q)/EWT(m)/BDS/ES(w)-2 ASD/ESD-3/SSD/  
AFFTC Pz-4/Pab-4 JD/JG/AT/IJP(C)

ACCESSION NR: AP3001343

S/0057/63/033/006/0766/0768

76  
75

AUTHOR: Molchanov, V. A.; Soshka, V.; Faruk, M. A.

TITLE: Angular distribution of sputtered tungsten and zinc particles

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 33, no. 2, 1963, 766-768

TOPIC TAGS: cathode sputtering, Wehner effect, W, Zn

ABSTRACT: Discovery of the effect of preferential ejection of particles in close-packed directions from single crystals under ion bombardment is attributed to G. K. Wehner (Phys. Rev., 102, 690, 1956). Subsequent to its discovery there have been many studies of preferential sputtering, but few give the actual angular distribution of the ejected particles. In the present work the authors used a previously described technique (ZhTF, 32, 1032, 1962) to study the angular distributions of ejection from tungsten and zinc single crystals. The deposit is caught on a collector and the spot is scanned on a microdensitometer. The projectiles were 30 keV argon ions. The density distribution over the deposit spot in the  $\langle 100 \rangle$  direction of a W single crystal is approximated by a Gaussian curve with a half-width of  $22^\circ$ . In case of bombardment of Zn crystals on the basal plane there were obtained six spots in the  $\langle 101 \rangle$  directions; again the

Card 1/2

L13039-63

ACCESSION NR: AP3001343

distributions are roughly approximated by Gaussian curves, but with some distortion owing to overlapping of neighboring deposits. The half-widths for individual spots in the  $\langle 101 \rangle$  directions of Zn are 24 to 28°. As in the case of cubic crystals there is correlation between the angular distribution of sputtered particles and the "valleys" in the curve characterizing the angular dependence of the sputtering factor. "The authors are grateful to M. W. Thompson (Harwell) for valuable suggestions regarding the procedure utilized for measuring angular distributions." Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 24Dec62

DATE ACQ: 01Jul63

ENCL: 00

SUB CODE: 00

NO REF Sov: 005

OTHER: 010

Card 2/2

YU.II. KLYKOV, G. I. V. RUKSHIN, L. K.

Effect of volumetric change in cement stone on pressure  
transfer with a cement ring. Trudy VNIIT no.9:49-55 '63.  
(MIRA 17:9)

FARUTIN, A.A.

Studying the principles of industry in Monchegorsk using the local  
metallurgical combine as a basis. Politekhnichesk. no.8:19-25 Ag '57.  
(MERA 10:9)

1. Zaveduyushchiy Monchegorskim gorodom.  
(Monchegorsk--Education, Cooperative)

FARUTIN, A.A.

Traveling pass to a distant Communist Youth League camp.  
Politekh. obuch. no.7:23-26 J1 '59. (MIRA 12:9)

1. Monchegorskiy gorodskoy otdel narodnogo obrazovaniya.  
(Communist Youth League)

"APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5

FARUTIN, M.

"Hunting beyond Mount Solnachnaya.. IUn. nat. no.4:3-4 Ap '57.  
(Lenin, Vladimir Il'ich, 1870-1924) (MLRA 10:6)

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R000412510003-5"

FARUTIN, M.

Faraway Soviet lands. IUn.nat. no.4:13-17 Ap '59. (MIRA 12:3)  
(Soviet Far East) (Mature study)

FARUTIN, MIkhail

Grandfather was cured by bees. IUn. nat., no. 8:26-27 Ag '59.  
(MIRA 12:10)

(Bees)

ARTEM'YEVA, N.S.; FARUTINA, L.M.

Restorative processes in the ovary under the influence of  
Thio-TEPA. Biul. eksp. biol. i med. 53 no.1:98-101 Ja '62.  
(MIRA 15:3)

1. Iz laboratorii rosta i razvitiya (zav. - prof. L.D. Liozner)  
Instituta eksperimental'noy biologii (dir. - prof. I.N. Mayskiy)  
AMN SSSR i laboratorii eksperimental'noy khimioterapii (zav. -  
chlen-korrespondent AMN SSSR prof. L.F. Larionov) Instituta  
klinicheskoy i eksperimental'noy onkologii (dir. - deystvitel'nyy  
chlen AMN SSSR prof. N.N. Blokhin) AMN SSSR, Moskva. Predstavlena  
deystvitel'nym chlenom AMN SSSR N.N. Blokhinym.  
(THIO-TEPA)  
(OVARIES)

FÁRY, ISTVÁN

2  
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Fáry, István. On straight line representation of planar graphs. *Acta Univ. Szegedi. Sect. Sci. Math.* 11, 229-233 (1948).

The author shows that if a finite graph  $G$  can be represented in the plane at all, then it can be represented in the plane with straight segments as edges. He assumes some theorems in point-set topology, e.g., that in a representation of a graph in the plane the edges meeting at any given vertex have a definite cyclic order.

W. T. Tutte.

Source: Mathematical Reviews, Vol 10 No. 2

*Fary, Istvan**Fary, István. Remarque sur le prolongement des transformations topologiques. Publ. Math. Debrecen 1, 109-115 (1949).*

The following theorem has been proved by Alexander [Proc. Nat. Acad. Sci. U. S. A. **10**, 6-8 (1924)]. Let  $S$  be a polyhedron in  $E^3$  homeomorphic to a 2-sphere. Then the union of  $S$  and its interior is homeomorphic to the solid ball  $B$  given by  $x^2 + y^2 + z^2 \leq 1$ . Alexander showed that the same conclusion holds if  $S$  is a surface in  $E^3$  homeomorphic to  $S^2$  with a certain condition on the intersection of  $S$  with each

plane of a parallel family. The author proves a theorem of this kind with a hypothesis in terms of the paratingent. At a point  $p$  of  $\Delta$  the paratingent is the set of all lines which are limits of secant lines through points  $x$  and  $y$  in  $S$  which approach  $p$ . The main result is then the following. Let  $S$  be a surface in  $E^3$  which is homeomorphic to  $S^2$ . If at each point of  $S$  the paratingent omits at least one line then the union of  $S$  and its interior is homeomorphic to  $B$ .

D. Montgomery (Princeton, N. J.)

1. A. M. FARY, Vol. 12, No. 1

FARY, ISTVAN: Remarks on the Prolongation of Topological Transformations

81

FARY, ISTVAN

Fáry, István. Sur certaines inégalités géométriques. Acta  
Sci. Math. Szeged 12, Leopoldo Fejér et Frederico Riesz  
LXX annos natis dedicatus, Pars A, 117-124 (1950).

By means of known results from integral geometry, the author proves the following inequalities. (1) Consider a closed curve in the ordinary space, and let  $L$  denote its length,  $r$  the radius of its circumscribed sphere, and  $G$  its total (absolute) curvature. Then  $rL \leq 4rG$ . For a plane curve the sharper inequality  $L \leq rG$  is valid. (2) Consider a closed surface, and let  $A$  denote its area,  $r$  the radius of its circumscribed sphere, and  $K$  the total absolute curvature, that is, the integral of the absolute value of the Gauss curvature. Then  $\pi A \leq 4\pi rK$ .

W. Perchtel

Source: Mathematical Reviews,

Vol. 12 No. 5.

FARY, I.

Fáry, I. und Rédei, L. Der zentrale-symmetrische Kern und die zentrale-symmetrische Hülle von konvexen Körpern. Math. Ann. 122; 205-220 (1950).

Let  $K$  be a fixed convex body with inner points in the Euclidean  $n$ -space and let  $Z$  denote any convex body which is central-symmetric with respect to some point. A body  $Z$  contained in  $K$  and having maximum volume  $V(Z)$  is called a central-symmetric kernel of  $K$  and denoted by  $K_*$ . A body  $Z$  containing  $K$  and having minimum volume is called a central-symmetric hull of  $K$  and denoted by  $K^*$ . The numbers  $c_*(K) = V(K_*)/V(K)$ ,  $c^*(K) = V(K)/V(K^*)$  are called the inner and outer centricities of  $K$ . The authors show that  $K_*$  is unique while  $K^*$  in general is not. A sufficient condition for the uniqueness of  $K^*$  is that all the boundary points of  $K$  are regular, that is, no boundary point is contained in more than one supporting hyperplane. The proofs are based on the following more general results. Let  $K$  and  $L$  be convex bodies,  $v \neq 0$  a fixed vector, and  $t$  a real variable. Then the  $n$ th root of the volume  $V_v(t)$  of  $K \cap (L+tv)$  is a concave function in that  $\mathbb{I}$ -interval in which it is positive. This follows

easily from the Brunn-Minkowski theorem. The condition for linearity yields the uniqueness of  $K_*$  if  $L$  is chosen as the body  $K$ . Furthermore, it is shown by elementary means that the volume  $V^*(t)$  of the convex hull of  $K \cup (L+tv)$  is a convex function of  $t$ . This is used in the investigation of the central-symmetric hulls. In the case where  $K$  is a simplex  $K_*$  and a  $K^*$  are described and the centricities are determined as functions of the dimension  $n$ . For  $c_*$  an integral expression (communicated to the authors by P. Turán) is given

W. Fenchel (Princeton, N. J.).

Topologij  
Topologij

Source: Mathematical Reviews,

Vol 12 No. 7

L 07080-67 EWT(m)/EWP(w)/EWP(v)/EWP(k) IJP(c) WY/EM/DJ/GD  
ACC NR: AT6026920 SOURCE CODE: UR/0000/66/000/000/0193/0198

AUTHOR: Devichenskiy, N. P.; Titov, F. M.; Fastritskiy, V. S.

69  
041

ORG: None

TITLE: Unit for semiautomatic measurement of free vibration decrements in gas turbine blades

SOURCE: AN SSSR. Institut metallurgii. Vnutrenneye treniye v metallakh i splavakh (Internal friction in metals and alloys). Moscow, Izd-vo Nauka, 1966, 193-198

TOPIC TAGS: vibration measurement, internal friction, electric measuring instrument, gas turbine, turbine blade, electronic test equipment

ABSTRACT: The unit mechanically measures the decrement of vibrations in turbine blades and converts these measurements into electrical pulses for semiautomatic determination of internal friction. The unit utilizes EID-1 and EID-2 electronic measuring devices, allowing for rapid measurement of the logarithmic decrement of free vibrations for jet engine turbine blades and utilizing the effect of eddy currents. The speed of measuring decrement with the EID-1 is about 30 times faster than by tensiometric or induction methods. One shortcoming of this unit is that the number of pulses obtained only corresponds to a constant ratio of amplitudes  $U_{\min}$  equal to 2. Another drawback is that the use of thyratone circuits reduces measuring accuracy. An advanced measuring device without the shortcomings

Card 1/2

SZENTPALY, Tibor; MOLNAR, Jozsefne; VAJNA, Gezane; FATA, Laszlo

Dyeing of polyester fabrics in jiggers by means of  $\beta$ -naphthol  
used as a carrier. Magy textil 15 no.9:426-427 S '63.

1. Kobanyai Textilmuvek.

FATACEANU, I., ing.

Heating by induction for forging. St si Teh Buc 15 no.8:7-8  
Ag '63

1. Director of the Planning Institute for Machine Construction.

L 38293-5 EFT(m)/EWP(b)/EWP(t) IJP(c) JD

ACCESSION NR: AP5011514

UR/0286/64/000/023/0069/0070

AUTHOR: Kudryavtsev, N. T.; Tyutina, K. M.; Fatakh-Alia, M. I.E.; Tyurina, N. A.

TITLE: Electrolytic cadmium plating. Class 48, No. 166868

18

B

SOURCE: Byulleten' izobreteniy i toyarnykh znakov, no. 23, 1964, 69-70

TOPIC TAGS: cadmium, electroplating

Abstract: A method of electrolytic cadmium plating from a cadmium oxide electrolyte is proposed for producing quality coatings where deposition is done in an electrolyte containing:

Ingredient	g/l
cadmium oxide	64 (1.0N)
aminoacetic acid	150 (2.0N)
sodium chloride	80 (1.5M)
gelatin	5-10
thiocarbamide	2.5

at a temperature of 18-25 °C, pH=7.5 and  $D_c = 0.1-2.0 \text{ A/dm}^2$ .

Card 1/2

FATAKHOV, Yu.M.

Locations at which flies hatch in the waste products of different industries.  
Gig. i san. no.9:54 S '53. (MLRA 6:8)

1. Institut malyarii i meditsinskoy parazitologii Uzbekskoy SSR. 2. Tadzhikskiy uchitel'skiy institut. (Flies) (Factory and trade waste)

FATAKHOV, Yu.M.

Growth of flies in industrial refuse. Med. paraz. i paraz. bol.  
24 no.2:179-180 Ap-Je '55. (MLRA 8:10)

1. Iz instituta malyarii i meditsinskoy parazitologii Ministerstva  
zdravookhraneniya Uzbekskoy SSR(dir. instituta-prof. L.M.Issayev)  
i Tadzhikskogo ucitel'skogo instituta (dir. instituta M.B.Baba-  
khodshayev)

(FLIES,  
develop. in indust. garbage)

(GARBAGE,  
develop. of flies in indust. garbage)  
(INDUSTRY AND OCCUPATION,  
develop. of flies in indust. garbage)

1977, 1978, 1979, 1980

FATAKHOV, Yu.M.

Selection of a substrate for egg laying by coprobiontic flies in  
Samarkand. Med.paraz. i paraz.bol.supplement to no.1:79 '57.  
(MIRA 11:1)

1. Iz Instituta malyarii i meditsinskoy parazitologii Ministerstva  
zdravookhraneniya Uzbekskoy SSR i Tadzhikskogo uchitel'skogo  
instituta.

(SAMARKAND--FLIES)

FATALIEV, Kh. M.

DECEASED

1963/1

c. 1962

PHYSICS

see ILC

PATALIYEV, M.D.

Operation of hydraulic brake controllers of draw works [in Azerbaijani with summary in Russian]. Aserb. naft. khoz. 37 no.3:16-18  
Mr '58. (MIRA 11:8)

(Hydraulic brakes)

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FATALIYEV, M.D.

Moment of resistance of hydraulic brakes [in Azerbaijani with  
summary in Russian]. Azerb. neft. khoz. 37 no.7:15-18 J1 '58.  
(Hydraulic brakes) (MIRA 11:9)

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CIA-RDP86-00513R000412510003-5"

FATALIYEV, M.D.

Effective rates for lowering drilling tools When using hydraulic  
brakes. Azerb.neft.khoz. 37 no.10:18-21 O '58.  
(MIRA 12:2)  
(Oil well drilling) (Hydraulic brakes)

FATALIYEV, Mamed Dzhafar oglu, kand. tekhn. nauk; IBATULOV, G.A., dots.,  
kand. tekhn. nauk, red.; RASHEVSKAYA, T.A., red. izd-va

[Hydraulic brake of a draw works] Gidravlicheskiy tormoz burevoi  
lebedki. Baku, Azerbaidzhanskoe gos. izd-vo neft. i nauchno-tekhn.  
lit-ry, 1960. 182 p. (MIRA 14:11)  
(Winches—Brakes) (Automatic control)

FATALIYEV, M.D.

Automatic control of drawworks by an electric brake. Azerb. nefti.  
khoz. 40 no. 3:17-19 Mr '61. (MIRA 14:5)  
(Automatic control) (Winches)

FATALIYEV, M.D.

Device for lowering the drilling tool. Mash. i neft. obor.  
no.3:25-30 '63 (MIRA 17:7)

1. AzNIIburneft'.

SEID-PZA, M.K.; FARADZHEV, T.G.; FATALIYEV, M.D.; TSELOVAL'NIKOV, V.F.; GUSAROV,  
N.V.

Causes of contractions of the hole and cave-ins in wells being  
drilled. Burenie no. 5:13-16 '64. (MIRA 18:5)

1. AzNIIburneft!.